

## REMARKS

The rejections presented in the Office Action dated August 9, 2005 have been considered. Claims 1-11 are pending in the application. Reconsideration and allowance of the application are respectfully requested.

The Office Action fails to establish that claims 1-2 and 8-9 are unpatentable under 35 USC §103(a) over "Yoneyama" (U.S. Patent No. 5,801,860 to Yoneyama) in view of "Yoshida" (U.S. Patent No. 6,480,308 to Yoshida et al.) and "Santhoff" (U.S. Patent No. 6,560,463 to Santhoff). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Yoneyama with teachings of Yoshida and Santhoff.

Among other limitations, the Office Action does not show that the Yoneyama-Yoshida-Santhoff combination teaches or suggests automatically setting an output power level of the coupled transmitter to the output power level indicated in the power-level message. That is, none of the references appear to use the output power level indicated in the power-level message, as sent from the transmitter to the receiver, as the power level for the transmitter.

Neither of Yoneyama nor Yoshida suggest a power code in the power-level message, and therefore, neither suggests using that value as the power level for the transmitter.

Santhoff's teachings also clearly do not teach that the power level indicated by the power code in the power-level message (from the transmitter to the receiver) is the output power level to which the coupled transmitter is set. Santhoff in FIG. 1 shows a paired first transmit circuit and a first receive circuit, along with a paired second transmit circuit and a second receive circuit. Santhoff measures the strength of a received signal at the second receive circuit and compares the strength against a decoded power factor from a first packet from the first transmit circuit. At the second receive circuit, Santhoff calculates an attenuation factor using the decoded power factor from the first packet and measured signal strength, and uses that attenuation factor to adjust the power of the second transmit circuit used to send a second packet back to the first receive circuit. Santhoff's first receive circuit then determines an attenuation factor using the measured signal strength and decoded

power factor and provides the attenuation factor to the first transmit circuit to adjust its power level (col. 4, l. 23-57).

The independent claims clearly set forth that the output power level of a coupled transmitter is set to the level specified by the output-power code in a power-level message from that transmitter to the coupled receiver. Note that the claims further indicate that a coupled transmitter and receiver are in different nodes. In contrast, Santhoff calculates an attenuation factor from the embedded power level in a received packet and uses that attenuation factor to adjust the power level, not at the transmit circuit that sent the packet, but at the transmit circuit paired with the receive circuit that received the packet. Thus, not only does Santhoff fail to teach setting the output-power level of a transmitter to the level indicated in a power-level message, but Santhoff also fails to teach that the transmitter that sent the power-level message with the power-level code is the transmitter whose output-power level is adjusted to the level indicated in that power-level message.

These limitations are further refined in claim 4 in which the output-power code from the satisfactory power-level message is transmitted back to the remote node that sent the satisfactory power-level message and that output-power code is used to set the output power level of the remote transmitter.

These and similar limitations are present in independent claims 8 and 9, and the Office Action fails to show that the Yoneyama-Yoshida-Santhoff combination teaches or suggests the limitations of these claims for at least the reasons set forth above.

The alleged motivation for modifying the teachings of Yoneyama and Yoshida with teachings of Santhoff is improper. The alleged motivation asserts that it would have been obvious to modify the teachings of Yoneyama and Yoshida with Santhoff's teachings of information about a power level in a data packet "because sending information about power level together with the signal to be transmitted allows the receiver to identify the desirable transmitting power and inform the associated transmitter via a feedback channel." This motivation is unsupported by evidence, and therefore is improper. There is no apparent evidence that either of Yoneyama or Yoshida have a need for or would benefit from power level information in a transmitted packet. For example, no evidence is presented that demonstrates that the approaches for setting the power level as described by Yoneyama and

Yoshida are in any way deficient. Nor is there any evidence that demonstrates how the approaches of Yoneyama and Yoshida would be improved. The alleged motivation for modifying Yoneyama and Yoshida to include Santhoff's power level in a sequence of messages is similarly deficient. It should be further noted that Santhoff is not in the art of optical communications. Therefore, the alleged motivation is conclusory and does not support a *prima facie* case of obviousness.

Claim 2 includes further limitations of detecting a power level at which a power-level message is first received; and setting the selected power level as a function of the power level at which a power-level message is first received. No specific teachings of the Yoneyama-Yoshida-Santhoff combination are cited as corresponding to these limitations. Furthermore, there are no apparent elements of the combination that appear to reasonably correspond. Therefore, the limitations of claim 2 are not shown to be suggested by the Yoneyama-Yoshida-Santhoff combination.

The rejection of claims 1-2 and 8-9 should be withdrawn because a *prima facie* case of obviousness is not established.

The Office Action fails to establish that claim 3 is unpatentable under 35 USC §103(a) over the Yoneyama-Yoshida-Santhoff combination as applied to claims 1-2 and 8-9 above, and further in view of "Suzuki" (U.S. Patent No. 5,517,608 to Suzuki et al.). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references and fails to provide a proper motivation for modifying the teachings of Yoneyama with teachings of Yoshida, Santhoff and Suzuki, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 3 includes limitations of and related to setting the selected power level a selected quantity above the power level at which the power-level message is first received. These limitations are clearly neither shown nor suggested by Suzuki. Suzuki teaches that a first message is sent at the maximum light emission intensity, and a response message is fed back to the transmitter (col. 5, l. 18). Suzuki then performs a binary search method in adjusting the light emission intensity (col. 5, l. 27). Thus, Suzuki's first message received is the one transmitted at the maximum light intensity, and there would be no reason for Suzuki to set the power level above

this first maximum light emission intensity. Therefore, the limitations of 3 are not shown to be suggested by the Yoneyama-Yoshida-Santhoff-Suzuki combination.

The alleged motivation for combining Suzuki with the Yoneyama-Yoshida-Santhoff combination is conclusory and improper. The alleged motivation states that "it would have been obvious ... to set power level slightly higher than value determined by a test, as taught by Suzuki et al., in the modified power level setting method of Yoneyama, Yoshida et al. and Santhoff because the approach of Suzuki et al. gives a margin for power level variation due to temperature and aging of laser diode." No evidence is provided to indicate that the Yoneyama-Yoshida-Santhoff combination does not already provide any margin for power level variation due to temperature and aging of laser diode. Therefore, the alleged motivation is simply an improper hindsight-based reconstruction of the invention.

The rejection of claim 3 over the Yoneyama-Yoshida-Santhoff-Suzuki combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claims 4-6 and 10-11 are unpatentable under 35 USC §103(a) over the Yoneyama-Yoshida-Santhoff combination as applied to claims 1-2 and 8-9 above, and further in view of "Batey, Jr." (U.S. Patent No. 6,104,512 to Batey, Jr. et al.) . The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of Yoneyama with teachings of Yoshida, Santhoff and Suzuki, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 4 includes limitations of transmitting, in response to the receiver-initialization complete signal, a transmit-initialization-complete message from the local transmitter to the remote receiver for setting the output power level of the remote transmitter. The transmit-initialization-complete message includes the output-power code from the satisfactory power-level message. It is respectfully submitted that neither Batey nor the Yoneyama-Yoshida-Santhoff combination teaches or suggests these limitations. For example, the Office Action fails to provide

any suggestion of a transmit-initialization-complete message including the output-power code from the satisfactory power-level message. Batey simply shows an ACK signal, and no teachings of the Yoneyama-Yoshida-Santhoff combination are cited or appear to suggest these limitations. Therefore, the Office Action fails to show that the limitations of claim 4 are suggested by the prior art.

Claims 5 and 6 depend from claim 4 and include further limitations that are not specifically addressed by the Office Action and do not appear to be suggested by the Yoneyama-Yoshida- Santhoff -Batey combination.

Claims 10 and 11 further limit the circuit arrangement of claim 9 and include limitations that are similar to those of claim 4. Thus, claims 10 and 11 are not shown to be unpatentable over the Yoneyama-Yoshida-Santhoff-Batey combination.

The alleged motivation for combining teachings of Batey with the Yoneyama-Yoshida- Santhoff combination is conclusory and improper. The alleged motivation states that "it would have been obvious ... to send acknowledgement message to transmitter from remote receiver to indicate success of power level search and to store search result, as taught by Batey, Jr. et al., in the modified power level setting method of Yoneyama, Yoshida et al. and Santhoff because such procedure indicates the success of power level search algorithm and stores the outcome of the search algorithm." This alleged motivation simply repeats the function of Batey. There is no evidence that the feedback mechanisms of the Yoneyama-Yoshida-Helms combination are in any way unsatisfactory. Therefore, the alleged motivation is simply a conclusion and an improper hindsight-based reconstruction of the invention.

The rejection of claims 4-6 and 10-11 over the Yoneyama-Yoshida-Santhoff-Batey combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claim 7 is unpatentable under 35 USC §103(a) over the Yoneyama-Yoshida-Santhoff-Batey combination as applied to claims 4-6 and 10-11 above, and further in view of Suzuki. The rejection is respectfully traversed because the Office Action fails to show that all the limitations


are suggested by the references, fails to provide a proper motivation for modifying the teachings of Yoneyama with teachings of Yoshida, Santhoff and Suzuki, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to show that Suzuki suggests the limitations of claim 7 for at least the reasons set forth above for claim 4. The alleged motivation for combining Suzuki with the Yoneyama-Yoshida- Santhoff-Batey combination is also deficient for at least the reasons set forth above for claim 4. Therefore, the rejection of claim 7 over the Yoneyama-Yoshida-Santhoff-Batey-Suzuki combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

Withdrawal of the rejections and reconsideration of the claims are respectfully requested in view of the remarks set forth above. No extension of time is thought to be necessary for consideration of this response. However, if an extension of time is required, please consider this a petition for a sufficient number of months for consideration of this response. If there are any additional fees in connection with this response, please charge Deposit Account No. 50-0996 (LMCO.010PA).

Respectfully submitted,

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